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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: **09/832,010**
Filed: **April 11, 2001**
Group Art Unit: **2685**
Examiner: **Tran, Pablo N.**
Attorney Docket No.: **20-464**

IN RE PATENT APPLICATION OF:
SMITH
TITLE: **SHORT MESSAGE DISTRIBUTION CENTER**

April 8, 2004

<u>APPEAL BRIEF</u>

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Commissioner for Patents
P.O. Box 1450
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Sir:

The Applicants submit herewith the following Appeal Brief in triplicate as required by 37 C.F.R. § 1.192.

(1) <u>REAL PARTY IN INTEREST</u>

The real party in interest is TeleCommunication Systems, Inc.

(2) <u>RELATED APPEALS AND INTERFERENCES</u>

The Applicants and their legal representatives and assignee are not aware of any other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the appending appeal.

(3) STATUS OF THE CLAIMS

Claims 1-28 are pending in this application, with claims 7-16 withdrawn from consideration by the Examiner. Claims 1-6 and 17-28 stand rejected.

(4) STATUS OF ANY AMENDMENT FILED SUBSEQUENT TO FINAL REJECTION

The Applicants have not filed any amendment after the Final rejection issued February 17, 2004.

(5) SUMMARY OF THE INVENTION

The present invention enables a Content Provider to direct messages via SMTP to an intermediatary Message Distribution Center (MDC) using standard SMTP Gateway and other well-known protocols. Short messages are inserted in the MDC into individual queues for each subscriber, and the provider is informed through conventional SMTP protocol messages that the short message has been accepted. If the carrier has specifically disallowed service for a MIN (e.g., in the case of churning), then the content provider is informed through an SMTP interchange that the recipient is invalid. This encourages providers to discontinue service to terminated MINs, thereby reducing traffic to the MDC.

(6) CONCISE STATEMENT OF THE ISSUES PRESENTED FOR REVIEW

(A) Whether claims 1, 17 and 23 are obvious under 35 U.S.C. §103(a) as allegedly being obvious over Gossman et al., U.S. Patent No. 6,181,935 ("Gossman") in view of Chandra et al., U.S. Patent No. 6,058,389 ("Chandra").

(B) Whether claims 1-3, 5, 6, 17-19, 21-25, 27 and 28 are obvious under 35 U.S.C. §103(a) as allegedly being obvious over Gossman in view of Foore et al., U.S. Patent No. 6,542,481 ("Foore").

(C)   Whether claims 4, 20 and 26 are obvious under 35 U.S.C. §103(a) as allegedly being obvious over Gossman in view of Foore, and further in view of Couts et al., U.S. Patent No. 5,974,054 ("Couts").

(7) WHETHER THE CLAIMS STAND OR FALL TOGETHER

Group I: Claims 1, 4-6, 17, 20-23 and 26-28 stand or fall together because each includes the following distinctive features:

(1)   a short message being placed in at least one of a plurality of subscriber queues each corresponding to a different subscriber;

Group II: Claims 2, 18 and 24 stand or fall together because each includes the following distinctive feature:

(1)   an RMI protocol communication channel.

Group III: Claims 3, 19 and 25 stand or fall together because each includes the following distinctive feature:

(1)   an SMPP protocol communication channel.

(8) ARGUMENTS WITH RESPECT TO THE ISSUES PRESENTED FOR REVIEW

(A)   Claims 1, 17 and 23 are not obvious under 35 U.S.C. § 103(a) over Gossman in view of Chandra.

All rejected claims 1, 17 and 23 require a short message being placed in at least one of a plurality of subscriber queues each corresponding to a different subscriber.

The Examiner alleges that Gossman discloses an **SMS message queue** by disclosing placing SMS messages in a memory, with the Examiner equating a memory to a queue (Final Office Action dated February 17, 2004, page 4).

A **queue** is a term of art, **NOT** equating to simply placing SMS messages in a memory. Queuing of items in a memory relates to an ordering of items written to memory and/or an ordering of items read from memory.

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Gossman fails to disclose use of a queue for any reason much less to store SMS messages.

The Examiner acknowledges that Gossman fails to disclose SMS messages that are stored in a particular queue from a plurality of subscriber queues (Office Action, page 4). However, the Examiner relies on Chandra to allegedly disclose such messages that are stored in a particular queue from a plurality of subscriber queues (Final Office Action dated February 17, 2004, page 4).

The Examiner requests that the Applicants consider the references as a whole (Final Office Action dated February 17, 2004, page 2). However, the Applicants respectfully request the Examiner consider Chandra as a whole. Chandra is relied on to disclose the deficiency in Gossman, i.e., SMS messages that are stored in a particular queue from a plurality of subscriber queues. However, Chandra is directed to application programs or processes that use requests for processing by an application from a queue, **having nothing to do with SMS**, as alleged by the Examiner.

Moreover, Chandra is directed to application programs or processes that use requests for processing by an application from a queue, and is **not** within the field of the inventors endeavor, namely providing queuing of SMS messages; further, Chandra is not reasonably pertinent to the particular problem with which the inventors were involved, efficiently directing SMS messages to a particular subscriber. Chandra provides no disclosure or suggestion of queuing SMS messages, and as such is **non-analogous art**. In re Wood, 202 USPQ 171, 174 (CCPA 1979).

Moreover, even if Chandra were remotely related to SMS messaging, which as discussed above Chandra is not, "teachings of references can be combined only if there is some suggestion or incentive to do so." In re Fine, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting ACS Hosp. Sys. v. Montefiore Hosp., 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original). Neither Chandra nor Gossman provide any motivation for queuing of SMS messages, much less a plurality of subscriber queues each corresponding to a

different subscriber in a wireless network, and a **short message** being placed in at least one of the plurality of subscriber queues before delivery to the wireless network, as recited by claims 1, 17 and 23.

Furthermore, the Examiner alleges the motivation of modifying Gossman's SMS system with Chandra's queuing system for requests for processing by an application is to "provide a method to receive, hold, and distribute SMS messages in response to a detect triggering events for a particular subscriber" (Final Office Action dated February 17, 2004, page 2). However, the Examiner's motivation of modifying Gossman is nonsensical since the functions reiterated by the Examiner that Gossman would be modified to perform are simply basic functions of any SMS system, i.e., to receive, hold, and distribute SMS messages in response to a detected triggering event for a particular subscriber, i.e., the triggering event being an SMS message being sent to a particular SMS subscriber. (see Gossman, item 6).

Moreover, combining Gossman's message delivery system for a wireless network with Chandra's application program or process queues would be nonsensical. The Examiner is combining two completely **unrelated** systems to allegedly arrive at Applicants' invention. Gossman's system fails to even disclose or suggest a need for a queue of application programs or processes.

At best, even if the theoretical combination of Gossman in view of Chandra were combinable and obvious (which they are not), Gossman would be modified for application programs or processes to use requests for processing by an application from a queue, **STILL** not providing a **single queue** for SMS messages, much less a plurality of subscriber queues each corresponding to a different subscriber in a wireless network, and a **short message** being placed in at least one of the plurality of subscriber queues before delivery to the wireless network, as recited by claims 1, 17 and 23.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Gossman in view of Chandra does not render obvious any of claims 1, 17 and

23. Thus, the rejection of claims 1, 17 and 23 under 35 U.S.C. § 103(a) is improper and should be reversed.

(B)   Claims 1, 5, 6, 17, 21-23, 27 and 28 are not obvious under 35 U.S.C. § 103(a) over Gossman in view of Foore.

All rejected claims 1, 5, 6, 17, 21-23, 27 and 28 require a <u>short message</u> being placed in at least one of a <u>plurality of subscriber queues each corresponding to a different subscriber</u>.

As discussed above, The Examiner alleges that Gossman discloses an **SMS message queue** by disclosing placing SMS messages in a <u>memory</u>, with the Examiner equating a <u>memory</u> to a <u>queue</u> (Final Office Action dated February 17, 2004, page 5).

As discussed above, a **queue** is a <u>term of art</u>, **NOT** equating to simply placing SMS messages in a <u>memory</u>. Queuing of items in a memory relates to an ordering of items written to memory and/or an ordering of items read from memory. Gossman fails to disclose use of a <u>queue</u> for <u>any reason</u> much less to store <u>SMS messages</u>.

The Examiner acknowledges that Gossman fails to disclose <u>SMS messages</u> that are stored in a <u>particular queue from a plurality of subscriber queues</u> (Final Office Action dated February 17, 2004, page 5). However, the Examiner relies on Foore to allegedly disclose such messages that are stored in a particular queue from a plurality of subscriber queues (Final Office Action dated February 17, 2004, page 5).

Foore appears to disclose a technique for providing high speed data service over standard wireless connections via a unique integration of protocols and existing cellular signaling (Abstract). A buffer, or queue, is established in a base unit for each subscriber with a wireless network (Foore, col. 6, lines 35-51).

Although Foore discloses establishing queues for each subscriber within a wireless network, Foore fails to even mention <u>SMS</u>. Foore's invention is directed toward <u>speeding Internet connections</u> for wireless devices, unrelated to

Applicants' use of queues for <u>SMS messages</u>. Queues to facilitate <u>Internet connections</u> by a wireless device are **NOT** queues to facilitate a <u>SMS</u>, as recited by claims 1, 5, 6, 17, 21-23, 27 and 28.

Moreover, Foore is directed to <u>speeding Internet connections</u> for wireless devices, and is **not** within the field of the inventors endeavor, namely providing <u>queuing of SMS messages</u>; further, Foore is not reasonably pertinent to the particular problem with which the inventors were involved, efficiently directing SMS messages to a particular subscriber. Chandra provides no disclosure or suggestion of queuing <u>SMS messages</u>, and as such is **non-analogous art**. <u>In re Wood</u>, 202 USPQ 171, 174 (CCPA 1979).

Furthermore, Gossman modified by the teachings of Foore would result in more efficiently servicing of subscribers with Gossman's wireless network with <u>Internet access</u>, **NOT** disclosing or suggesting facilitating <u>SMS</u>, much less disclose or suggest a <u>short message</u> being placed in at least one of a <u>plurality of subscriber queues each corresponding to a different subscriber</u>, as recited by claims 1, 5, 6, 17, 21-23, 27 and 28.

At best, even if the theoretical combination of Gossman in view of Foore were combinable and obvious (which they are not), Gossman would be modified for to establish queues for each subscriber within a wireless network, to <u>speed Internet connections</u>, **STILL** not providing a **single queue** for SMS messages, much less a <u>short message</u> being placed in at least one of a <u>plurality of subscriber queues each corresponding to a different subscriber</u>, as recited by claims 1, 17 and 23.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Gossman in view of Foore does not render obvious any of claims 1, 5, 6, 17, 21-23, 27 and 28. Thus, the rejection of claims 1, 5, 6, 17, 21-23, 27 and 28 under 35 U.S.C. § 103(a) is improper and should be reversed.

(C) Claims 2, 18 and 24 are not obvious under 35 U.S.C. § 103(a) over Gossman in view of Foore.

All rejected claims 2, 18 and 24 require an <u>RMI protocol</u> communication channel.

The Examiner acknowledges that Gossman in view of Foore fails to disclose or suggest an RMI protocol communication channel (Final Office Action dated February 17, 2004, page 5). However, the Office Action relies on Official Notice that such is well known in the art, alleging that it would have been obvious to modify Gossman in view of Foore in order to provide any such standard protocol configurations for exchanging data to be implemented on an existing communication system to **save cost** (Final Office Action dated February 17, 2004, page 5).

Contrary to the Examiner assertion, modifying Gossman in view of Foore with an RMI protocol communication channel would require modification of disclosed components within the system to translate to and from an RMI protocol, an <u>additional</u> protocol to the ones disclosed. Components to perform such translations to and from existing components would **add cost** to the modified system <u>without providing additional functionality to the existing system</u> that fails to disclose or suggest a <u>need</u> for an RMI protocol communication channel, a non-obvious modification of Gossman in view of Foore.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Gossman in view of Foore does not render obvious any of claims 2, 18 and 24. Thus, the rejection of claims 2, 18 and 24 under 35 U.S.C. § 103(a) is improper and should be reversed.

(D)   Claims 3, 19 and 25 are not obvious under 35 U.S.C. § 103(a) over Gossman in view of Foore.

All rejected claims 3, 19 and 25 require an <u>SMPP protocol</u> communication channel.

The Examiner acknowledges that Gossman in view of Foore fails to disclose or suggest an SMPP protocol communication channel (Final Office Action dated February 17, 2004, page 5). However, the Office Action relies on Official Notice that such is well known in the art, alleging that it would have been obvious to modify Gossman in view of Foore in order to provide any such standard protocol configurations for exchanging data to be implemented on an existing communication system to **save cost** (Final Office Action dated February 17, 2004, page 5).

Contrary to the Examiner assertion, modifying Gossman in view of Foore with an SMPP protocol communication channel would require modification of disclosed components within the system to translate to and from an SMPP protocol, an <u>additional</u> protocol to the ones disclosed. Components to perform such translations to and from existing components would **add cost** to the modified system <u>without providing additional functionality to the existing system</u> that fails to disclose or suggest a <u>need</u> for an SMPP protocol communication channel, a <u>non-obvious modification</u> of Gossman in view of Foore.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Gossman in view of Foore does not render obvious any of claims 3, 19 and 25. Thus, the rejection of claims 3, 19 and 25 under 35 U.S.C. § 103(a) is improper and should be reversed.

(E) Claims 4, 20 and 26 are not obvious under 35 U.S.C. § 103(a) over Gossman in view of Foore and Couts.

All rejected claims 4, 20 and 26 require a <u>short message</u> being placed in at least one of a <u>plurality of subscriber queues each corresponding to a different subscriber</u>.

As discussed above, Gossman in view of Foore fails to disclose, teach or suggest a <u>short message</u> being placed in at least one of a <u>plurality of subscriber queues each corresponding to a different subscriber</u>, as recited by claims 4, 20 and 26.

The Office Action relies on Couts to allegedly make up for the deficiencies in Gossman and Foore to arrive at the invention of claims 4, 20 and 26. The Applicants respectfully disagree.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Gossman in view of Foore and Couts does not render obvious any of claims 4, 20 and 26. Thus, the rejection of claims 4, 20 and 26 under 35 U.S.C. § 103(a) is improper and should be reversed.

Couts appears to disclose a method in a radio messaging system for forming a current frame of data, while maintaining a current transmission order for numbered messages (Couts, col. 1, lines 51-54). A processor selects a candidate message from a message queue (Abstract). The processor tests whether an available space in a current frame of data is sufficient to accommodate the candidate message (Couts, Abstract). The messages within the system are paging messages (Couts, col. 2, line 59-col. 3, lines 17).

Couts fails to even mention <u>SMS</u>, much less <u>queues</u> for use with an <u>SMS</u> system. Couts discloses a <u>single</u> FIFO message queue that stores <u>paging messages</u>. Couts's <u>single</u> FIFO message queue for storage of <u>paging messages</u> is **NOT** a <u>plurality</u> of **subscriber queues** for use in an <u>SMS system</u>, much less a <u>short message</u> being placed in at least one of a <u>plurality of subscriber queues each corresponding to a different subscriber</u>, as recited by claims 4, 20 and 26.
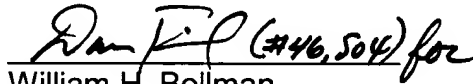
Gossman in view of Foore and Couts fails to disclose, teach or suggest a <u>short message</u> being placed in at least one of a <u>plurality of subscriber queues each corresponding to a different subscriber</u>, as recited by claims 4, 20 and 26.

It is respectfully submitted that not only does this rejection fail on its face, and thus is improper, but also in light of the above comments its clear that Gossman in view of Foore and Couts does not render obvious any of claims 4, 20 and 26. Thus, the rejection of claims 4, 20 and 26 under 35 U.S.C. § 103(a) is improper and should be reversed.

CONCLUSION

For all the reasons set forth above, the rejections of claims 1-6 and 17-28 are improper and should be reversed. The Applicants therefore respectfully request that this Appeal be granted and that the rejections of the claims be reversed.

Respectfully submitted,

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APPENDIX

CLAIMS INVOLVED IN THE APPEAL

1. A message distribution center interposed between a source of a short message and a wireless network including an intended recipient of said short message, said message distribution center comprising:

an SMTP protocol communication channel to receive said short message from said source of said short message;

a plurality of subscriber queues each corresponding to a different subscriber in said wireless network, said short message being placed in at least one of said plurality of subscriber queues before delivery to said wireless network; and

a communication channel to communicate said short message to said wireless network.

2. The message distribution center according to claim 1, wherein:

said communication channel with said wireless network is an RMI protocol communication channel.

3. The message distribution center according to claim 1, wherein:

said communication channel with said wireless network is an SMPP protocol communication channel.

4. The message distribution center according to claim 1, wherein:

each of said plurality of subscriber queues operates in a first in-first out fashion.

5. The message distribution center according to claim 1, further comprising:

a predetermined maximum number of short messages in each of said plurality of subscriber queues.

6. The message distribution center according to claim 1, wherein: said wireless network is a wireless intelligent network (WIN).

17. A method of message distribution between a source of a short message and a wireless network including an intended recipient of said short message, said method of message distribution comprising:

receiving said short message from said source of said short message utilizing an SMTP protocol communication channel;

placing said short message in at least one of a plurality of subscriber queues before delivery to said wireless network, said plurality of subscriber queues each corresponding to a different subscriber in said wireless network; and

communicating said short message to said wireless network utilizing a communication channel.

18. The method of message distribution according to claim 17, wherein:

said communication channel with said wireless network is an RMI protocol communication channel.

19. The method of message distribution according to claim 17, wherein:

said communication channel with said wireless network is an SMPP protocol communication channel.

20. The method of message distribution according to claim 17, wherein:

each of said plurality of subscriber queues operates in a first in-first out fashion.

21.   The method of message distribution according to claim 17, further comprising:

placing a predetermined maximum number of short messages in each of said plurality of subscriber queues.

22.   The method of message distribution according to claim 17, wherein:

said wireless network is a wireless intelligent network (WIN).

23.   An apparatus for message distribution between a source of a short message and a wireless network including an intended recipient of said short message, said apparatus for message distribution comprising:

means for receiving said short message from said source of said short message utilizing an SMTP protocol communication channel;

means for placing said short message in at least one of a plurality of subscriber queues before delivery to said wireless network, said plurality of subscriber queues each corresponding to a different subscriber in said wireless network; and

means for communicating said short message to said wireless network utilizing a communication channel.

24.   The apparatus for message distribution according to claim 23, wherein:

said communication channel with said wireless network is an RMI protocol communication channel.

25.   The apparatus for message distribution according to claim 23, wherein:

said communication channel with said wireless network is an SMPP protocol communication channel.

26. The apparatus for message distribution according to claim 23, wherein:

each of said plurality of subscriber queues operates in a first in-first out fashion.

27. The apparatus for message distribution according to claim 23, further comprising:

placing a predetermined maximum number of short messages in each of said plurality of subscriber queues.

28. The apparatus for message distribution according to claim 23, wherein:

said wireless network is a wireless intelligent network (WIN).